

EXHIBIT 9

MAO DECLARATION OPPOSITION TO GOOGLE'S MOTION TO EXCLUDE LASINSKI

DOCUMENT SOUGHT TO BE SEALED

Meeting Name**KEY TAKEAWAYS***Summary***NOTES**

- Notes

Day 2: Sellside breakout sessions

AdMob MCM Intro

KEY TAKEAWAYS*Summary***NOTES**

- Smaller app publishers are hiring big agencies to manage their app monetization strategies
- AdMob MCM provides a platform to enable agencies to provide monetization services and uphold contractual rev-share payments
- AdMob accounts are set up for each child account, so that the MCM owner can manage the account, but also provides visibility for the child to see the account performance, etc.
- Invite starts from the Channel Partner, but must be accepted by the publisher. This includes setting the auto payment % that will be deducted from the account to pay the channel partner.
- This mechanism follows the AdSense Channel Partner account structure used today
- *?? Is this available to all AdMob accounts today ??*

Redacted - Privileged

- When an relationship link ends, the data is cloned for the period of time that the relationship was active and is given to the account manager. All future metrics are not shared.
- Coming Features
 - Enhanced Analytics (AdMob+)
 - Open Bidding
 - APIs, Reporting at first
 - Additional FRs from pubs
 -

AdMob+

KEY TAKEAWAYS

- *I think having AdMob plus will be a huge improvement to reporting. Right now it seems like it's a pain, but this should simplify the process and get more pubs using the product.*

NOTES

- In 2016, we launched the Firebase/AdMob integration

[REDACTED]

AdMob+

- When creating an App in AdMob, we allow users to enable advanced reporting
- Pubs are then given a specific ID which will create a GA Gold Account for the App

- All analytics data collected from AdMob will flow to GA Gold which will be stored and parsed here, but reported back through the AdMob UI
- New Features

SDK Architecture

- In today's world, you have to implement both the GMA (AdMob) SDK and the Google Analytics for Firebase SDK.
- GA for Firebase is currently the official conversion tracking SDK.
- AdMob + GA for Firebase = New AppM SDK
-

Mediation and Open Bidding

NOTES

- Without mediation, a publisher calls Google to get ads, and we return the ads back to the publisher
- This breaks when a publisher wants to run multiple ad networks
 - Some nets have low fill rates, but high quality ads
 - Some nets have only video ads
- Without mediation, a publisher needs to change the order of the SDKs and re-publish the app every time they want to make this change
- Publisher using AdMob mediation
 - Publisher defines a set of SDKs into Mediation Groups and provides some basic targeting / matching for each mediation group
 - Within each group, we make a request to each ad network to determine who can fulfill the mediation group
 - We choose the network that can pay the most for the ad slot
 - Mediation chain does not know the price of the bid, it's not an auction
- Campaign is a house ad to promote their own product in another app of theirs.
- ANO = Ad Network Optimization
 - "Dynamically order mediation chain according to predicted performance of 3P networks"
 - We don't have the bid per request, so we scrape the average bid per day from their API
 - We scrape their data using an authorized login token that they provide to us, so we don't need their credentials
- Live CPM++
 - This is a system the optimizes placement based on using predicted performance
 - We look at the bid compared to the next bid and multiple by probability of winning

Open Bidding

- Three phases: Prime (Exchanges), Network (Network Usage), Whals (Large pubs with special requirements)
- Open Bidding is the RTB Solution to address challenges in Mediation
- Allows for RTB across different networks and exchanges using a combination of first price and second price auctions
- Our goal for open bidding is to get new pubs using the open bidding platform, but keep existing publishers on the mediation platform
 - We need more publishers and more networks/exchanges to integrate with open bidding in order to ensure there is adequate competition to make it worthwhile for mediation pubs to switch

Back-end Serving for Apps

NOTES

- Two products: AdMob and DRX. DRX is for larger pubs.

- [illegible]

- [illegible]

Gaming

NOTES

- Many publishers are afraid of adding ads because they do not want to scare off their most valuable users.

- [REDACTED]
- Because of this, it prevents paying users from getting frustrated from seeing ads

Comment [1]: this is kind of equivalent to our holdback, and being able to quantify whether we're causing lowered impressions

Comment [2]: Also, I think whole point has an equivalent on the web, which is that they don't want to discourage / scare off users who would take some other desirable action

Comment [3]: +1. The ML optimizations that these teams are doing. FC should use prediction models to determine whether or not they are likely to whitelist, pay or bounce.

Comment [4]: yeah. There is also the point that if someone has been willing to donate / pay before, or is someone who subscribes somewhere, they're probably way more likely to do so on another site as well, and we should be very careful annoying them, versus someone who never ends up subscribing / paying.

- AdMob+ Launching in 2019
 - Enables our ad inventory system to integrate with our metrics
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AdMob / DRX Platforms

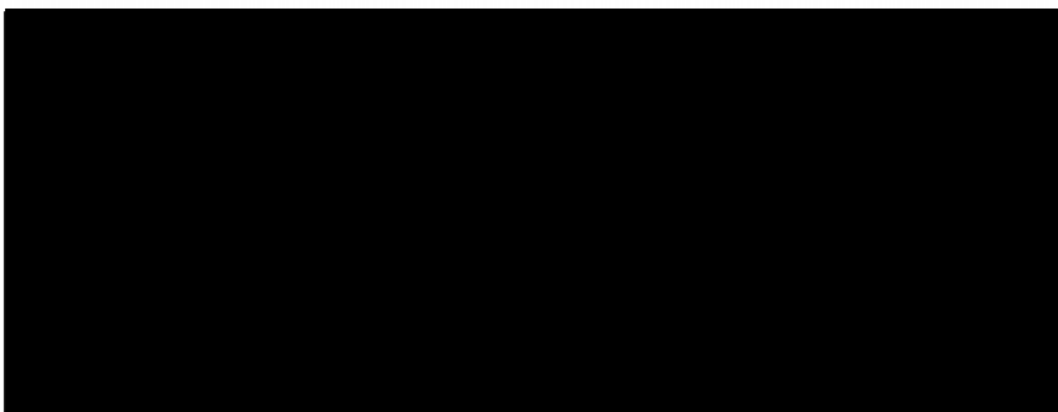
NOTES

- [joined a bit late so missed the start of this session]
- Gist of presentation: currently it's a very complex landscape for app developers to make money. They showed the vision of how they want to simplify how the developer makes money, [REDACTED]

AdMob UX

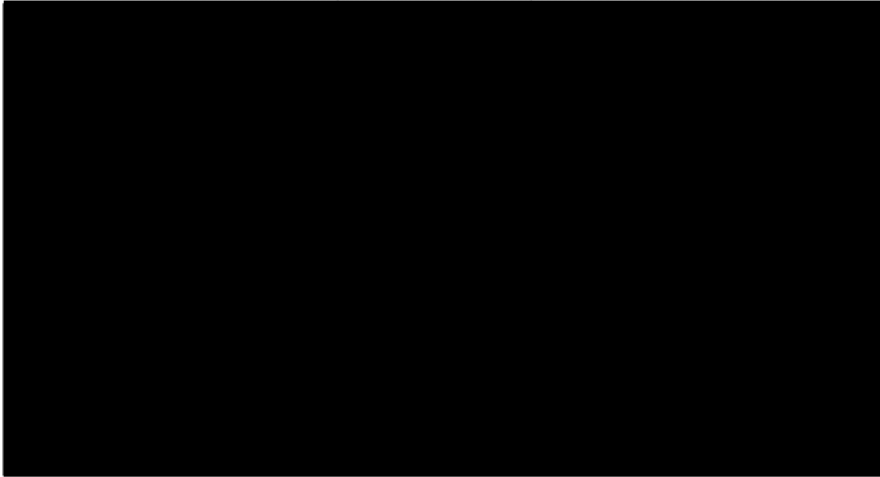
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Personas



 go/admob-personas

Publishers



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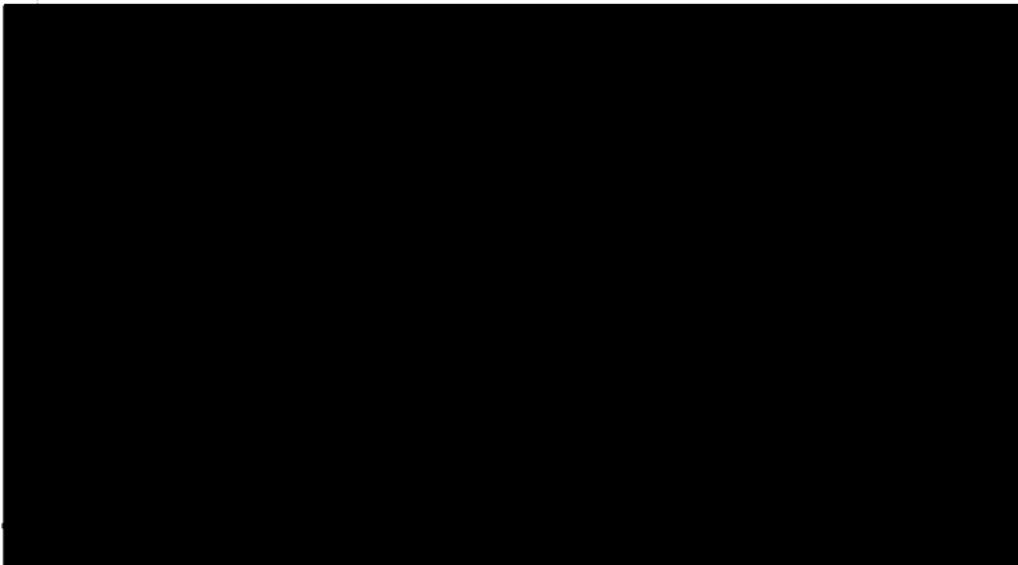
Ad Manager

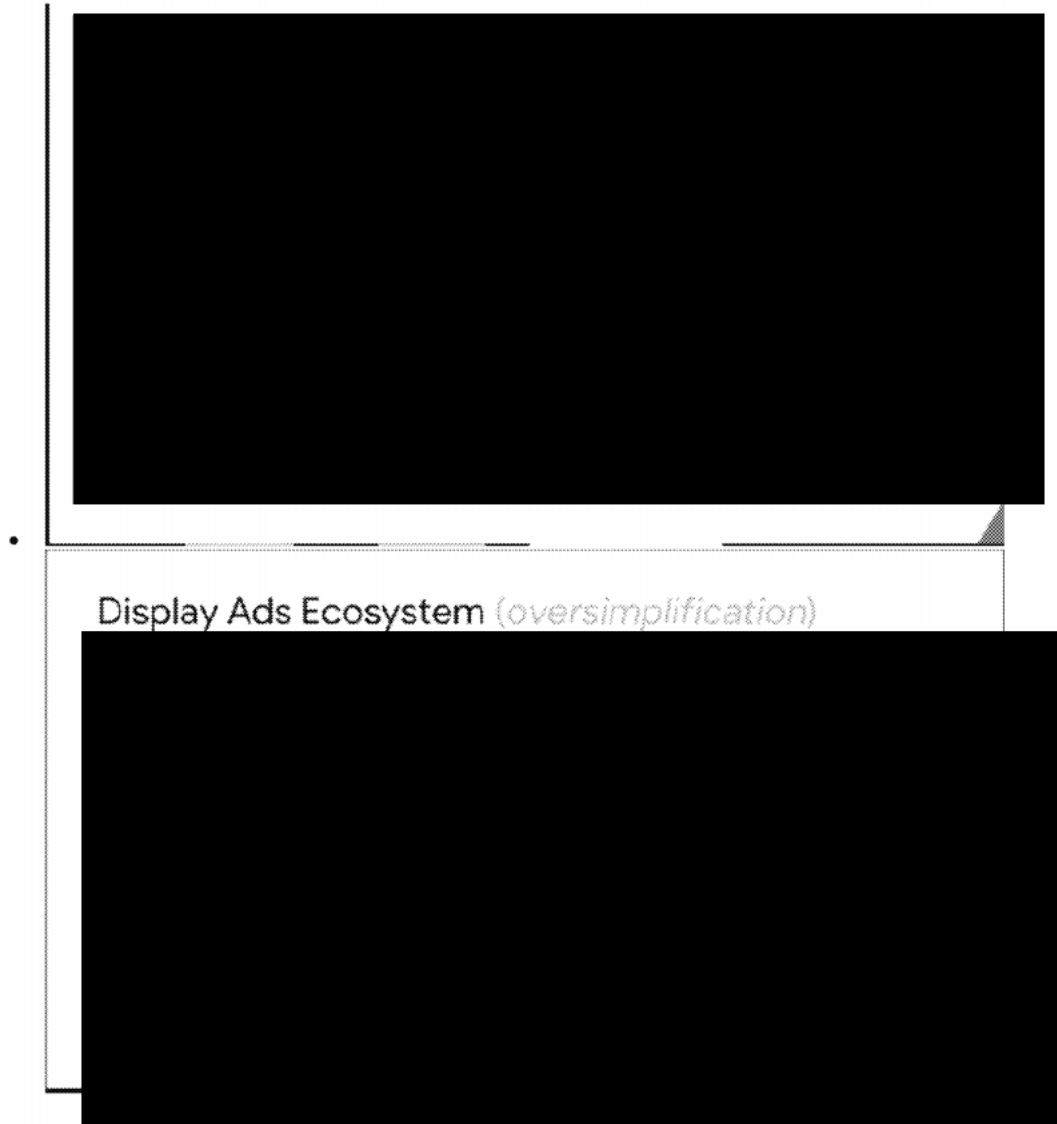
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AdMob platform

- A bunch of APIs





Day 2: Buyside breakout sessions

App Conversion Tracking

KEY TAKEAWAYS

There is currently no conversion tracking for iOS on Google.com! This is being solved with [REDACTED]

NOTES

- The 3P SDK makes a request to google that contains the dev token, app event, link id, \user id, etc.
- We return back a JSON response that provides campaign ID, campaign name, customer id, location, timestamp
- We have an understanding with 3P analytics providers that the data will be accurate. We are ultimately at their mercy to make sur that they are giving us credit properly.
- Facebook and Google are the Self-Attribting Networks (SAN) -- therefore we always count all of the conversions and the 3P is responsible for giving these numbers a 'haircut'
- For firebase, Scion is the backend that communicates with AdWords about the conversion info. Scion will also talk to the other ad nets.
- Codeless, is a feature built into play, that tracks conversion for free. These are installs.
- CTC (Clickthrough) -- Reporting Window (Install) = 30 days -- App Events = 90 Days
- EVC (Engaged View), watching 10 secs of video -- 2 days -- 90 Days
- VTC (Viewthrough) -- 1 day - 90 Days
- There is currently no conversion tracking for iOS on Google.com!
- How iOS Click Conversion will work
 - Signed in users: EventFE provides a mapping of GAIA to Device ID
 - For non-signed in users: WE crated a mapping of web cookie to device Id when they go to the app store
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Ad Formats

KEY TAKEAWAYS

Formats don't matter as much as the context. For example, in Facebook feed, you want to have native ads that look exactly like the News Feed. But if you're in Instagram, the format can be more flexible, but you need to have a large, high quality image front and center, similar to the Instagram feed

NOTES

- The bread and butter format is the gMob Interstitial Video. This format allows for modification if the video is landscape or portrait, automatically. We've learned that the larger the video, the better. When the video ends, we show the screenshots of the app pulled from the app store
- For images, we automatically add in the install button, the logo, and the rating. [REDACTED]
- Text CTD format allows for any arbitrary size defined by the publisher to fit custom app implementations
-

Bidding and Optimization for UAC Campaigns

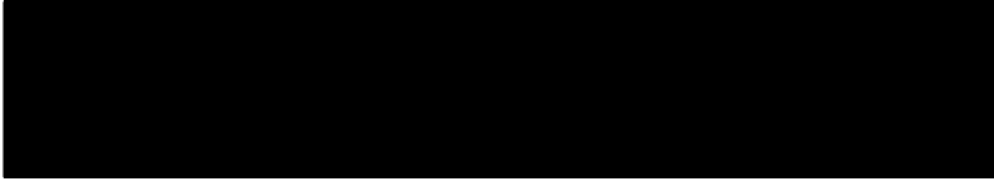
SUMMARY / KEY TAKEAWAYS

- We simplify the buying process as much as possible, by eliminating any targeting options for the advertiser
- [REDACTED]

NOTES

- We tried to simplify Universal App Campaigns as much as possible, allowing them to:
 - Add Assets

- Pick a Country and Language
- Optimization Type
- Bidding Type
- Budget
- Unlike traditional search or other campaign types, we don't require advertisers to select targeting
- Advertisers send the value of the acquisition via conversion ping, which is used to optimize for target CPA and Install Volume
- Optimization Types: Maximize Installs, Maximize Events (Some event in the app), or Target CPE (Action)
- We want advertisers to focus on the economics (bid, budget, value, etc.) and we will handle the complexity of finding the users that will meet their goals



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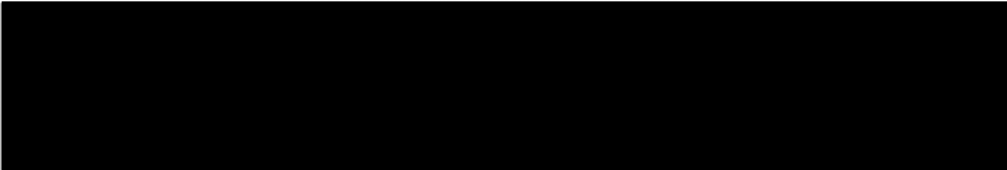
Search Targeting

NOTES

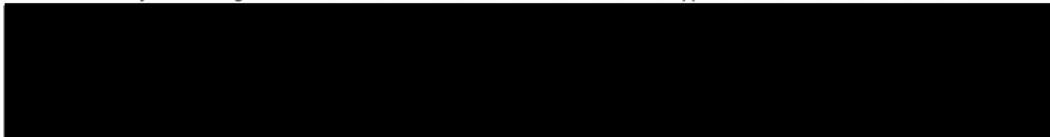
Filtering / Targeting

- What is Apps Query Targeting?
 - "Given a query, retrieve all possibly relevant app inventory for UAC and UACe across all query properties.
- Filtering Process
- Two Products: UAC and UACe, Three stacks (Search ADMixer, Play mixer, Viral), Four Properties: mobile google.com, AFS, Play Search and YT Search.

Relevance



- A query depends on the context. Searching for Weather on google.com is for the current weather, but on YT or Play store it might be an extreme weather video or weather forecast app.





Deep Links and UACe

- Issues
 - Traditional KWs are not successful for determining how to deep-link
 - We can't necessarily crawl the app, as we hit login screens sometime
 - Using web mapping to app deep links isn't necessarily 1:1
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Day 1: Apps Overview

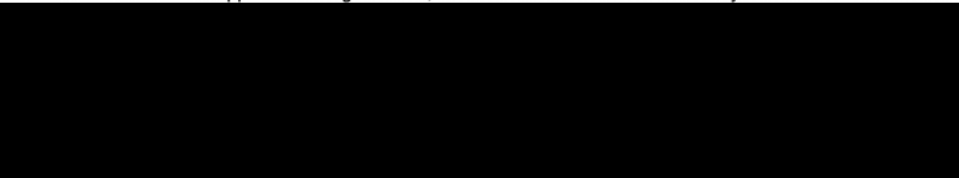
Identity

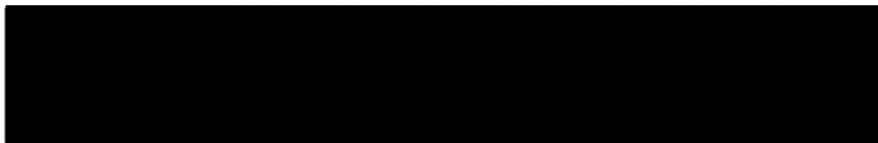
MEETING SUMMARY

Summary

NOTES

- In order to optimize UAC campaigns we need:
 - Conversion Data (from the app: installs, app events, etc.)
 - User Data (list of users has installed, so we can exclude)
- Device ID: IDFA and ADId on Apple/Android are resettable values that define a device
- App Conversion
 - Event happens inside the app.
 - SDK is wired up to listen to that event
 - SDK sends ping to 3P Server
 - 3P server akss Google, FB and any other network "Hey, did you send device ID { 12345 } to download this game?"
- Publishers can also use these pings to create remarketing lists: "Send a ping for all users that reach level 10, to put them on a Level 15 remarketing list, because we know that users that reach Level 10 are very likely to buy credits to get to level 15."
- Device ID is appended to click string so that this is logged in the ClickServer, which can be looked up in Kansas when someone actually converts.
- GAIA Keyed Data = The one key that will allow us to provide all the transparency and controls available in the Google Activity report
- Things like "Same device transparency" is tough because if you have a shared device, browsing behavior and activity can be exposed
- Death of IDFA?
 - There are some bad actors that are joining IDFA Data with other metrics that are making device id a potentially dangerous identifier
 - If IDFA doesn't exist, publishers and game developers will lose a lot of money → This will also lead to developers creating a fingerprinting mechanism which is even worse than IDFA.
 - Even if Apple wants to get rid of it, there are obvious trade-offs that they need to consider





Sell Side: Alexandra Volta (CL4)

Buy Side Crane Beach (CL2)

Buyside Serving Tech

NOTES

- [REDACTED]
- There are different bids that are optimized for the creative and target pairing to hit the target conversion value
- [REDACTED]
- UAC Bidder
 - Max Installs: Maximize the # of installs based on my CPI.
 - Target CPA: Maximize in-app events (conversions, rides for uber, etc.) given a budget and target CPA
 - Target ROAS: Maximize Return on Ad Spend
- Each of these bidding mechanisms has a formula to create a per-impressions value.
- Each pCTR model is owned by each channel.
- O&O uses a concept of lifetime value (LTV) = MaxECPM - Reserve
 - Reserve is calculated based on the user's value. If the user has a low value, it will be reduced from the LTV calculation
 - Reserve basically means = Will a user like this ad?
- Most advertisers use App Opens as the app install, because hitting the install button is not as accurate. Users may bail on the install or never open the app.
 - If you install the app (per the definition above), we will remove that ad from the auction for you.
 - We age installs out 1/3 of the year based on RADs, but on iOS this is estimated based on heuristics of usage
- RADs only works on Android, not iOS.
- [REDACTED]

Developer Panel

MEETING SUMMARY

Summary

NOTES

- Gaming: How do monetize the 95% of users that don't pay?
 - This is where ads come in, but we want to be careful about the user experience.
 - A lot of testing to make sure that this is a "feature" of the game and not something to be annoying
- Why do you use AdMob over Ad Manager? [PERCEPTION]
 - "DFP" is so old school, it's the old way of doing business -- on the web.

- AdMob is more app-focused.

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Sellside 101

NOTES

- Formats: Banner, Native, Interstitial and Rewarded
- What is Native?
 - We will send all the parts of an ad that can be styled accordingly to however the app developer wants it built
 - Facebook was doing this..
 - This allows developers to customize the ad experience for their apps
- Interstitials work great at the end of a level, banners are good slapped into the bottom of the screen
- If a developer wants to get ads in their app, what do they need to do?
 - Create AdMob account (TapJoy, FAN, Amazon are all other options)
 - Create a few units -- places she wants to put ads
 - Download the SDK and add it into the App
 - Add some code where she wants to put the ads, linking the ad unit to the AdMob inventory unit
 - Ad Unit = Ad on the splash page, the ad that runs after the level ends, etc.
 - Creating different ad units allows advertisers to bid properly for the more competitive, more useful ads
- When deciding which network to choose, pubs choose Formats first: Is it implemented properly? Does it look right? Right sizes? Landscape vs. Portrait?
- How do I make more money?

- AdMob can report not only on Ads revenue, but also IAP or eCommerce revenue
- Ad Exposure: Banner ads might represent 90% of exposure, while interstitial is more like 0.5%
- New App Dashboard (Fenix) provides Firebase data into two cards shown on the AdMob dashboard
- Open Bidding = An exchange to help create a programmatic approach to create one unified auction. This allows for one SDK to create a unified auction with single reporting
- There is currently a lot of overlap between AdMob and AdManager. Ad Manager will allow for programmatic and the new combined auction / open bidding
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]

Buyside 101

NOTES

Universal App Campaigns

- Before UAC
 - We originally had different campaign types to buy across Google (Google.com, GDN, Gmail, Mobile, etc.)
 - Campaign targeting options varied by type (Geo, Gender, Placements, Custom Match, Labels, etc.)
 - It was a lot of work for small advertisers to understand and use the platform to build a comprehensive marketing plan online
- Idea behind UAC: Advertisers create budget, bid, text, basic targeting and we run it everywhere.
- At first, the feedback was mixed/negative..
- In April 2017, AW3 planned to shut down and replace with AdWords Next. should we continue with individual campaign types or flesh out UAC? Went all-in on UAC.
 - Between Q1 2017 and Q1 2018 UAC revenue nearly increased 250%.
 - All development happens on UAC campaigns today

Measurement in Apps

- IDFA, AdID are the IDs for the device. When you download an app, the device ID is reported back using the AdWords SDK
- Three main ways to track: 3P SDKs (AppsFlyer, Kochava), Codeless tracking using Android Play, and Firebase
- 3P Tracking ecosystem allows for attribution of installs (for example, if you click on an ad on FB and Google, who gets credit?)
 - Known as Self-Attributing Network (SAN)
 - When a user installs an app, the TUNE SDK makes a request to Google, Facebook, etc.. and asks for any ad-related data associated with that device id, and will report on the data. Last click wins.
- We have an App Attribution Partner Program that is intended to work with 3Ps to ensure that they are representing the data accurately
- Engaged View Conversions (EVCs)
 - If a user watches a video for 10 seconds and then converts 2 days later, this is the same as a click conversion. (5 seconds past the skip point)
 - These run across YT and AdMob
- View-through Conversion
 - Users sees an ad and then converts within 24 hours.
 - This might be an ad for Uber in the FB feed and then downloads the app within 24 hours.
 - This attribution mod is used by about 50% of our businesses

iOS

- We can't match cookie ids (Safari browser) to the IDFA which is used for 3P tracking
- [REDACTED]
- Facebook does not have the same problem because they have a click from App. The issue is Web > App Store >> App Install.
- [REDACTED]

China

- China represents the #1 gaming market, globally.
- Doesn't buy into the 3P Tracking (SAN)
- More privacy challenges

2019 Planning

- [REDACTED] higher target for OKRs in 2019
- Pillars for 2019

- Pre-registration ads and re-engagement after installs and re-engagement campaign with users who previously installed

- How do you optimize for the users that are more likely to spend in IAP? Some spend thousands!

Appification

Competitive Landscape

NOTES

Facebook

- Top 5 companies in S&P 500 are Tech Stocks (Apple, Amazon, Google, Microsoft, Facebook)
- Facebook's mobile app drove adoption and growth after 2013. In 2018, approximately 96% of usages is mobile (71% mobile only)
- As users have evolved their behavior (using apps) Facebook and Google have evolved the ecosystem to mobile
 - It's taken a long time for tracking, targeting and measurement and thing like this to come along
- FB has the largest market cap loss in big cap stock ever (-144k) in July 2018
 - Expenses increasing in order to support brand safety, but also new product growth
 - Revenue growth is slowing (y/y growth cut in half)
 - Use fatigue; Spending less time on news feed
 - Users are moving away from Facebook and moving towards instagram; "I don't trust what FB is doing with my data, so I'm going to use Instagram instead."
 - Time spent on the platform going down in favor of better user experience (Less spam, etc.)
 - Revenue decelerating to less than 50% per year.
- 2B daily active users touch one of Facebook's apps a day (Family Audience)
 - CPMs for Instagram and Facebook news feeds are comparable, but the target or strategy for news feed vs. communications is clear
 - Story eCPMs are generally lower
- What is FB worried about?
 - From 2013 >> 2018, the company can drive more advertiser demand on the system through targeting improvements and better technology.
 - This technology may be tapping out..
- Wall Street expects FB growth to double in the next 3 years (55b > 115b)
 - Additional growth will come from their other apps, but they still need their news feed to grow
 - FB Watch will hopefully replicate YT on the Facebook platform

Amazon

- Amazon is expected to hit \$9B in ads revenue in 2018 (bigger than Twitter, Snap, and Pinterest combined). Only behind Google and Facebook.
- 80% of their ad spend is their PLA format, 10% coming from their DSP but this is growing
- Revenue Breakdown: 25% AWS, 25% 1P Retail, 15-20% 3P Sellers/Marketplace, 5-10% Ads
- Outside the US, Prime is a more valuable offering than 2-day shipping in other countries where 2 day shipping is common
- Amazon is 3x bigger than the next biggest online retailer (Walmart)
- What might slow Amazon's progress?
 - Themselves: Hubris, lack of focus, labor relations
 - Ecosystem: Logistics, manufacturer buy-in, sellers getting frustrated with counterfeiters, etc.
 - External Factors: Other platforms (Google Assistant), Large retailers (Walmart), Government Regulation -- esp. in EU
-

App Annie: Industry Overview

SUMMARY

- 10 Years in and growth is strong and broad
- Engagement continues to expand, time spent in app continues to expand
- Forms of monetization are broadening and becoming more complex
- Growth is global and transforming every industry

NOTES

- As the time of mobile usage increases, the average number of apps used per month grows much less slowly (35 apps per month, per person).
- Users have an average of 90 apps installed, and many do not uninstall. Having the app on-device allows for push notifications, etc., which are considered less intrusive than emails, etc.
- Out of every hour spent on a device, 52 minutes are spent on Apps (vs. Mobile Web/Browser)
- App experience is important == Porting over a web experience 1:1 to app will lead to low reviews.
- App Market Phases: Experimentation → Expansion → Maturation. The key metrics for these stages are: Downloads, usage, and Revenue.
 - Things like adding Carrier Billing to a country can have a huge impact on revenue for a given country
- In the next 5 years, App store revenue is anticipated to increase from 100B to 156B.
 - Rate is slowing of downloads, but revenue is ramping up more quickly due to maturation
 - Growth is being driven by China and India (emerging markets), though downloads is anticipated to go down in the US.
 - Spend is being driven in APAC, but established markets are still competitive. Anticipated revenue growth may double in the US, despite downloads going down.
- Another shock to the system, that can move a country to the next maturity stage, was when 4G rolled out in India in 2016 -- allowing users to more easily stream video on-the-go.
- Monetization Methods
 - Freemium = Free download, with in-app purchases
 - Candy Crush realized that they could eliminate ads all together because in-app purchases were so lucrative
 - Paid = Pay to download, no in-app purchases
 - Paidmium = Paid download with in-app purchases (Minecraft is most successful in this model)
 - In-App Advertising = Contains ads.

- Determine your strategy for the app before choosing a monetization method >> If you want to encourage users to come to your store (Ikea), charging for the app is contrary to your overall strategy
- Freemium Methods: Free Trial, Usage (limit usage), Functionality (limit functions, power-ups), User Experience (Ad Supported, paid vs. free app) or a combination of all of these
- The number of unique ad creatives are increasing for the top apps: 79 (170% increase y/y)
- Content providers used to give content away to streaming services to make their content more popular, but these providers realize that creating their own app is more valuable.. How will this play out?
- Disney coming into the market with a streaming app in 2019, how will this impact consolidation? Netflix?